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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,315	09/10/2004	Bernd Zschke	257253US0PCT	4070
22850	7590	06/10/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
COONEY, JOHN M				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
06/10/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/507,315

**Applicant(s)**

ZASCHKE ET AL.

**Examiner**

John Cooney

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 February 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2 and 4-17 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 10 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/808)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

Applicant's arguments filed 2-26-08 have been fully considered but they are not persuasive.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, and 4-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants' claims are confusing as to intent because it can not be determined what degree of overlap in particle size distribution are intended to be included by the claim limitation "the peaks of the large and small particles...do not overlap". As determination of the beginning and end of a "peak" is a subjective determination, determination of what degree of overlap in particle size distribution is intended by the claims.

Applicants' arguments have been considered. However, rejection is maintained. The following previous arguments are maintained:

Applicants' arguments have been considered. However, rejection is maintained. Confusion in the claims does not reside in what is meant by "overlap", but, rather, it resides in determining when a peak begins or ends, and then, accordingly, when said overlap of peaks would begin and end. One having ordinary skill in the art can not readily determine what distributions of particle sizes are included or excluded by the claims as they currently stand.

Though the submitted declaration is useful in establishing some guidance as to what degrees of observed particle distribution in the valleys between distribution peaks

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may be fairly interpreted as no particle presence (It is noted though that the data for example 2 even raises questions about this guidance), it does not address the fundamental problem, in the instant case, that the ordinary practitioner can not readily determine what distributions of particle sizes are included or excluded by the claims as they currently stand.

Further, the declarant's conclusory opinion that the "peaks are well separated and do not overlap" is of no probative value in overcoming the instant rejection because this opinion and the evidence which supports it does not address the problem that one of ordinary skill in the art can not readily determine what distributions of particle sizes are included or excluded by the claims as they currently stand.

Even example 2, also mentioned above, helps begin to exemplify the confusion associated with applicants' claims. Is the approach to zero of this example sufficient to be deemed no overlap? The declaration and the other evidence of record do not establish what degree of an approach to zero constitutes no overlap as currently claimed by applicants.

As to applicants' latest arguments, the submitted opinion declaration is unpersuasive for the claims as they currently stand because the tests referred to in applicants' arguments and declaration are not reflected by the claims. The claims do not reflect the test conditions referred to by applicants' arguments and declaration.

Claim 16 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 16 and 17 are, additionally, confusing as to intent because it can not be determined what light scattering methods are intended to be included or excluded from the determination methods defined by the claims used to determined the ranges of value limitations defined by the claims. Further, it can not be determined what degrees

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of particle distribution overlap are intended to be included or excluded by the recited non-specific means of determining particle size distribution.

Applicants' arguments have been considered. However, rejection is maintained.

The following previous arguments are maintained:

Applicants' arguments have been considered. However, rejection is maintained. Applicants' comments do not serve to make identification of what methods of value determination and/or degrees of particle size distribution overlap are included or excluded from the metes and bounds of the claims determinable.

As to applicants' latest arguments, it is held that examiner's above held position applies, as well, to "a light scattering method" as defined by claim 16. The submitted opinion declaration is unpersuasive for the claims as they currently stand because the tests referred to in applicants' arguments and declaration are not reflected by the claims. The claims do not reflect the test conditions referred to by applicants' arguments and declaration.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP-0,786,480 in view of Perry et al.(6,127,443).

EP-0,786,480 discloses preparations of polyurethane articles using polymer polyols which include polymer particles having narrow particle size distributions inclusive of the particle size distributions defined by applicants' claims (see abstract, as well as, the entire document).

EP-0,786,480 differs from applicants' claims in that combinations of different polymer polyols are not employed. However, Perry et al. discloses formations of combinations of polymer polyols for the purpose of realization of unitary polyol mixtures for use in making energy management urethane articles (see column 5 and examples 1-5, as well as, the entire document). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed blends of polymer polyols as disclosed by Perry et al. in the making of polyol materials and polyurethane articles of EP-0,786,480 for the purpose of achieving unitary polyol mixtures of combined polymer polyol ingredients for imparting the energy management effects of in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

It has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Reese* 129 USPQ 402 . Further, a prima facie case of obviousness has been held to exist where the proportions of a reference are close enough to those of the claims to lead to an expectation of similar

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properties. *Titanium Metals v Banner* 227 USPQ 773. (see also MPEP 2144.05 I)

Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980). The size of particles employed in the formation of polymer polyols are well studied, and polymer particle size differences have well known and expected effects on the stabilities and viscosities of the polyols which containing said polymer particles and on the physical properties of articles realized from the polymer polyols formed. Combinations of results arriving from the employment of blends of these polymer polyols having different particle sizes is not seen to rise above optimization of that which is known from the teachings of the prior art, and a demonstrated showings of new or unexpected results commensurate in scope with the scope of the claims is not seen to have been set forth in the evidence of record.

Applicants' arguments have been considered. However, rejection is maintained.

The following previous arguments are maintained:

Applicants' arguments have been considered. However, rejection is maintained for the reasons set forth above. It is the secondary teaching that is looked to for the teaching and the motivation to employ blends of polymer polyols. It is not seen that looking to the secondary teaching for its teaching of the use of blends of polymer polyols in the manner indicated in the rejection above would destroy the essential teachings of the primary reference as alleged by applicants. Though the primary reference is directed towards employment of polyols having narrow particle size distribution, it is not seen that employing multiple polymer polyols as provided for by the secondary teaching to arrive at preparations involving blends of polymer polyols having more than one narrow particle size distribution would destroy the essential teachings of the primary reference.

Applicants' latest arguments have been considered, but are unpersuasive for all the reasons stated, again, above. It is maintained that the reasons for combination of the teachings are proper, and Perry et al. is properly looked to for its disclosure of employment of multiple polymer polyol compositions. It is not looked to for the disclosure of narrow particle size distributions in the employed polymer polyol, this narrow particle distribution is already provided for by the primary references. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Rejection is based on the combined teachings of the cited prior art, and operation within the combined teachings of the cited prior art in order to arrive at the products and processes of applicants' claims is maintained to be evident.

Further, that the primary teaching may be most interested in a single narrow particle size distribution does not negate the combination of the teachings as set forth in the rejection above, nor does it negate the expectation of success from the combination of the teachings of the cited prior art. Again, it is the combination of the prior art which must be looked at for what it fairly teaches not each teaching individually.

As to applicants' latest arguments, it is held and maintained that rejection is proper for the reasons set forth above. Perry et al. is not looked to for the elements discussed in applicants' reply. Rather Perry et al. is looked to for its disclosure of employment of combinations of polymer polyols. Polymer polyols having narrow particle distributions are provided for by EP-0,786,480, and examiner maintains that blends of different polymer polyols having narrow particle distributions would have been within the purview of the ordinary practitioner in the art based on the combined teachings of EP-0,786,480 and Perry et al.

Additionally, it is held and maintained that it is within the skill of the ordinary practitioner to arrive at a bicompositional composition from two different components,



with each component having different and independent narrow particle distributions, from operating within the teachings of the combined prior art in order to arrive at the products and processes of applicants' claims.

As to any distinction between graft and polymer polyols that may be alleged. It is held that it is widely known that polymer polyols are also referred to as graft polymer polyols, graft polyols, or copolymer polyols; all of these terms are used to describe products that are basically stable dispersions of vinyl polymers in polyols. Polymer polyols are produced by the in-situ polymerization of a vinyl monomer in a base polyol. Applicants' do not identify differences in the material make-ups of their claims such that distinction between graft polyols of the claims and polymer polyols of the cited prior art is evident.

The evidence of record is not sufficient in negating examiner's position of obviousness, nor is sufficient evidence of new or unexpected results, commensurate in scope with the scope of the claims, set forth that would overcome the position of obviousness set forth.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Cooney/

Primary Examiner, Art Unit 1796